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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/281,464	03/30/1999	FOLKERT HORST	0690811-0007	7264

7590 03/07/2005  
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EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/281,464

Applicant(s)

HORST ET AL.

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-33,43-46,53-83,85-99 and 104-158 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-33,43-46,53-83,85-99,104-137 and 145-155 is/are allowed.
- 6) ☒ Claim(s) 138-144 and 156-158 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/2/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is responsive to the RCE and Amendment filed on 11/4/04.

#### ***Information Disclosure Statement***

1. Regarding to the IDS filed on 12/31/03, the examiner does not have, in record, copies of followings references (listed under section OTHER DOCUMENTS of the IDS):

- European Search Report dated 28.07.03,
- Search Report entitled: "Remote Control Systems for Locomotives: Review of Technical and Trade Literature, 1980 Forward" Compiled by Information Works Inc. for Lauric Mitchel, CANAC Inc. May 20, 2003, p. 1-110, bibliography, and
- European Search Report dated 28.07.03.

The applicant is now required to provide/re-provide copies of these references.

2. Regarding to the IDS filed on 7/2/04, the examiner has received only front pages, not full copies of following references (listed under section OTHER DOCUMENTS), (and therefore these references are not initialed in the IDS by the examiner):

- Declaration of Folkert Horst dated June 18, 2004,
- Theimeg facsimile dated March 21, 2004, and
- Theimeg facsimile dated April 30, 1993.

The applicant is now required to provide/re-provide copies of these references in full.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 138-144 and 156-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kriyama (5,729,210), previously cited, in view of Sklar, "Digital Communications Fundamentals and Applications", newly-cited.

-Regarding to claim 138, see figures 3-7 and 9, and col. 3, line 1, to col. 5, line 12, Kriyama discloses a transmitting system (20) (figure 3) for remotely controlling a machine (e.g., a vehicle (see figures 9a, 9B), (which is considered equivalent with the limitation "locomotive"), wherein the system comprises:

an interface (23) for receiving an identification code (see col. 3, lines 4-5), (which is considered equivalent with the limitation "identifier" of a slave controller (30) via a first wireless communication link (IR) (see col. 3, lines 8-9); and

a signal transmitting unit (24) for transmitting a signal over a second communication link, the second communication link being an RF (wireless) communication link, the signal (see figure 6) being indicative of at least one command (FUNCTIONAL CODE) (for causing an action to be performed by the machine), the signal conveying data (PERSONAL ID CODE) derived from the identification code received over the first communication link (see col. 3, lines 13-22 and col. 4, lines 25-29).

Kriyama does not disclose that the signal is a modulated signal and said signal transmitting unit includes a modulator outputting the modulated signal.

Kriyama discloses that the signal is formed as a result signal of a combination (see figure 6) of the identification code and a functional code before being transmitted over the second communication link (see col. 3, lines 18-22).

Sklar discloses that a transmitter system using a modulator (Modulate) (see figure 1.2) to modulating a signal to be transmitted on a transmission channel into a waveform that compatible with the transmission channel (see page 5).

Therefore, it would have been obvious for a person skilled in the art to implement Kriyama signal transmitting unit with a modulator in such a way the result signal is modulated by said modulator into a modulated signal, as taught by Sklar, in order to make the result signal (now become as the modulated signal) compatible with a desired transmission channel of the second communication link that the modulated signal is transmitted on.

-Regarding to claim 139, Kriyama discloses that the system comprises a data storage (25) in communication with said interface for storing the identification code received via the first communication link (see figure 3, and col. 3, lines 13-17).

-Regarding to claim 140, Kriyama does not disclose that said data storage is operative to store an identifier of said system. However, using a memory storage to store more than one information is well-known in the art, and the examiner takes Official Notice. Therefore, it would have been obvious for one skilled in the art to implement Kriyama storage to store other information besides the identification code, wherein the other information may include the an identifier of said system for another purpose, if desired or required by the system, without affecting the overall system performance.

-Regarding to claim 141, Kriyama includes a message builder (24)(see figure 3)in communication with said data storage, said message builder being operative to construct a message, namely, the result signal,(see figure 6) having a tag portion (HEADER, PERSONAL ID) and a command portion (FUNCTIONAL CODE), the tag portion conveying data derived

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from the identifier of the slave controller and data derived from the identifier of said transmitter, the command portion conveying the at least one command (see col. 3, lines 18-22, col. 4, lines 25-30 and col. 4, line 66 to col. 5, line 3).

-Regarding to claim 142, the Kriyama system, in view of Sklar, can include an message encoder (Formatting) (see Sklar, figure 1.2) to format or encode the message constructed by said message builder into digital symbols before being modulated by said modulator (see also Sklar, page 5).

-Regarding to claim 143, said Kriyama message encoder, in view of Sklar, can be implemented to process the message constructed by said message builder to reduce an occurrence of consecutive 0's or 1's in the message constructed by said message builder, or in another word, reduce dc energy from the message's spectrum in order to enable the Kriyama system in view of Sklar to be ac coupled and/or reduce the system bandwidth by the reduction of said dc energy) (see Sklar, page 81).

-Claim 144 is rejected with reasons set forth for claims 141-143.

-Regarding to claim 156, Kriyama discloses that said first communication link is an IR link (see col. 3, lines 8-9).

-Regarding to claims 157 and 158, Kriyama in view of Sklar does not discloses that the action to be performed by the machine is acceleration or braking. However, the novelty of Kriyama invention in view of Sklar is to remotely control operations of a slave machine. Therefore, for some particular application of remotely controlling operation of a vehicle, it would have been obvious for one skilled in the art, when building or carrying out Kriyama invention in view of Sklar for remotely controlling operations of said vehicle, within skills of the

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one skilled in the art, and upon his system requirement, to implement the action to be performed by said vehicle is acceleration or braking in order to meet the system requirements.

***Allowable Subject Matter***

5. Claims 30-33, 43-46, 53-83, 85-99, 104-137 and 145-155 are allowed.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

**PHUONG PHU  
PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631

Phuong Phu  
3/3/05